Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of training a quality assessment tool comprising the steps of

dividing a database comprising a plurality of samples, each with an associated mean opinion score, into a plurality of distortion sets of samples according to a dominant distortion present in each sample; and

training a distortion specific assessment handler for each distortion set, ~~such that~~to generate ~~a~~an optimized fit between a distortion specific quality measure generated from

a distortion specific plurality of parameters for a sample and

the mean opinion score associated with said sample

~~is optimised;~~

generating a quality prediction result based on said optimized fit; and

storing the quality prediction result in a computer-readable medium.

2. (Currently Amended) A method according to claim 1, further comprising the steps of

training the quality assessment tool, such that a fit between a quality measure generated from

a non-distortion specific plurality of parameters together with a distortion specific quality measure for a sample, and

the mean opinion score associated with said sample, is ~~optimised~~optimized.

3. (Previously Presented) A method according to claim 1 in which the samples represent speech transmitted over a telecommunications network, and in which the

quality measure is representative of the quality of the speech perceived by an average user.

4. (Currently Amended) A method of assessing speech quality of a sample in a telecommunications network comprising the steps of

identifying ~~an identified~~ a first dominant distortion type for the sample, the ~~identified~~ first dominant distortion type being selected from a plurality of possible distortion types;

selecting a ~~selected~~ first distortion specific assessment handler in dependence upon said ~~identified~~ first dominant distortion type from a plurality of distortion specific assessment handlers, each of said plurality of distortion specific assessment handlers being associated with a respective one of said plurality of possible distortion types;

using the ~~selected~~ first distortion specific assessment handler to combine a plurality of parameters specific to said ~~identified~~ first dominant distortion type to provide a distortion specific quality measure for the sample; ~~and~~

generating a quality measure in dependence upon the distortion specific quality measure; and

storing said quality measure in a computer-readable medium.

5. (Original) A method according to claim 4 in which the generating step comprises the sub step of

combining a non-distortion specific plurality of parameters with said distortion specific quality measure to provide said quality measure.

6. (Previously Presented) A method according to claim 4 in which the samples represent speech transmitted over a telecommunications network, and in which the quality measure is representative of the quality of the speech perceived by an average user.

7. (Currently Amended)   A computer readable medium carrying a computer program for implementing ~~the~~ a method ~~according to claim 1~~ comprising:

dividing a database comprising a plurality of samples, each with an associated mean opinion score, into a plurality of distortion sets of samples according to a dominant distortion present in each sample; and

training a distortion specific assessment handler for each distortion set, such that a fit between a distortion specific quality measure generated from

a distortion specific plurality of parameters for a sample and

the mean opinion score associated with said sample

is ~~optimised~~ optimized.

8. (Cancelled)

9. (Currently Amended) An apparatus for assessing speech quality of a sample in a telecommunications network comprising

means for identifying ~~an identified~~ a first dominant distortion type for the sample, the ~~identified~~ first dominant distortion type being selected from a plurality of possible distortion types;

a plurality of distortion specific assessment handlers each of said plurality of distortion specific assessment handlers being associated with a respective one of said plurality of possible distortion types for combining a distortion specific plurality of parameters to provide a distortion specific quality measure for the sample;

means for selecting a selected distortion specific assessment handler in dependence upon said ~~identified~~ first dominant distortion type from said plurality of distortion specific assessment handlers; and

means for generating a quality measure in dependence upon the distortion specific quality measure; and,

a computer-readable medium for storing said quality measure.

10. (Original) An apparatus according to claim 9, in which

the generating means comprises means for combining a non-distortion specific plurality of parameters with said distortion specific quality measure to provide said quality measure.

11. (Currently Amended) An apparatus for training a quality assessment tool comprising

means for dividing a database comprising a plurality of samples, each with an associated mean opinion score, into a plurality of distortion sets of samples according to a dominant distortion present in each sample; and

means for training a distortion specific assessment handler for each distortion set, ~~such that a~~to provide an optimized fit between a distortion specific quality measure generated from

a distortion specific plurality of parameters for a sample and

the mean opinion score associated with said sample: and

~~is optimised~~

a computer-readable medium for storing said optimized fit.

12. (Currently Amended) An apparatus according to claim 11, further comprising

means for training the quality assessment tool, such that a fit between a quality measure generated from

a non-distortion specific plurality of parameters together with a distortion specific quality measure for a sample, and

the mean opinion score associated with said sample,

is ~~optimised~~optimized.

13. (Previously Presented) A method according to claim 2 in which the samples represent speech transmitted over a telecommunications network, and in which the quality measure is representative of the quality of the speech perceived by an average user.

14. (Previously Presented) A method according to claim 5 in which the samples represent speech transmitted over a telecommunications network, and in which the quality measure is representative of the quality of the speech perceived by an average user.

15. (Currently Amended) A computer readable medium ~~as recited in Claim 7,~~ wherein said ~~carrying a computer program for implementing the~~ method ~~according to claim 2~~further comprises:

      training the quality assessment tool, such that a fit between a quality measure generated from

           a non-distortion specific plurality of parameters together with a

           distortion specific quality measure for a sample, and

      the mean opinion score associated with said sample is optimized.

16. (Currently Amended) A computer readable medium ~~as recited in Claim 7,~~ wherein said ~~carrying a computer program for implementing the method according to claim 3~~samples represent speech transmitted over a telecommunications network, and said quality measure is representative of the quality of the speech perceived by an average user.

17. (Currently Amended) A computer readable medium ~~as recited in Claim 7,~~ wherein said ~~carrying a computer program for implementing the~~ method ~~according to claim 4~~further comprises:

      identifying a first dominant distortion type for a sample, the first dominant distortion type being selected from a plurality of possible distortion types;

      selecting a first distortion specific assessment handler in dependence upon said first dominant distortion type from a plurality of distortion specific assessment handlers, each of said plurality of distortion specific assessment handlers being associated with a respective one of said plurality of possible distortion types;

using the first distortion specific assessment handler to combine a plurality of parameters specific to said first dominant distortion type to provide a distortion specific quality measure for the sample; and

generating a quality measure in dependence upon the distortion specific quality measure.

Claims 18 – 20: (Cancelled)